



COMDTINST 5231.2
15 MAY 1988

COMMANDANT INSTRUCTION 5231.2

Subj: **Planning Approval For Automated Information Systems (AIS)**

- Ref:
- (a) COMDTINST 5230.26 (series) Small Information Resources Management (IRM) Systems Acquisition Documentation
 - (b) COMDTINST 5234.3 (series) Standard Terminal Application Software Deployment
 - (c) COMDTINST 5230.24 (series) Information Resources Management (IRM) System Acquisition Authority
 - (d) COMDTINST M5230.8 (series) ADP Plan

1. PURPOSE. This instruction establishes procedures to achieve the integration of Automated Information Systems (AIS) and the effective use of AIS resources through improved planning. It requires the involvement of Commandant(G-TIS) at an early stage of system development, when Commandant(G-TIS) can best add value to the development process, and establishes a means to identify systems which should be included in the Coast Guard Information Systems Architecture and Master Plan (under development).
2. BACKGROUND. Commandant(G-T) is responsible for ensuring AIS are planned and operated in accordance with accepted practice and standards, and are integrated across organizational boundaries to obtain the maximum return from AIS investments. Building an information system that functions properly and is used to its full potential requires detailed planning. Every aspect must be carefully thought through if trouble is to be avoided and scarce resources used effectively. Problems which commonly result from poor planning include:

2. a. System Failure. The AIS may simply fail to produce expected benefits and be discarded if planning does not address key issue such as: organizational impact, capacity to use software, training, impact on users, security, adherence to standards, access to data, communications, inter-operability, etc..
- b. Benefit Reduction. Even if a system continues to be used, a failure to plan properly may result in failure to achieve the benefits expected, particularly if the system cannot be integrated with existing or future systems. This is particularly burdensome for systems where projected personnel savings justify the system, but problems in implementation result in a premature loss of personnel resources before the system can perform as planned.
- c. Increased Cost. Closely linked with benefit reduction, a lack of planning for needs such as training, software maintenance, computer capacity or security requirements (Risk Assessments, Sensitive Application Certification, Contingency Plan) can result in significantly increased costs to produce expected benefits.
- d. Security. A failure to address system security in the planning stage can result in loss of data, unauthorized access to information and very significant costs to retrofit a system to "repair" security problems.
- e. Inconsistent Data. Without adequate planning for system data, erroneous information may be produced, users may be unnecessarily burdened and sharing of data across organizational boundaries may be impossible.
- f. Lack Of Support. The Coast Guard lacks the funds and technical expertise necessary to support the operation and maintenance of all but a limited subset of technology at any given time. Without early support planning, system implementation and operation will be hampered by support limitations. Poorly planned systems seldom survive the loss of key personnel.

3. DISCUSSION.

- a. Automated Information System. An Automated Information System (AIS) is defined as: the resources (hardware, software, etc.) and automated procedures which process (i.e., collect, store, update) data to transform it into information to support one or more missions of the Coast Guard. AIS includes office automation, data communications, automated data processing, and associated activities.
- b. Early Involvement In Planning Stage. The early involvement of Commandant(G-TIS) in the planning stage will increase the likelihood that the resulting system avoids the pitfalls identified above, expedites AIS procurement and system implementation, and ensures compatibility with other efforts in order to achieve systems integration.
- c. Relation To Other Directives. (Notifications or AIS Proposals submitted to Commandant(G-TIS) under this instruction replace the ten-step justification required by reference (a). However the following directives must still be consulted:
 - (1) Final Commandant(G-TIS) approval is required by reference (b) before release of Standard Terminal software by Headquarters Program Managers.
 - (2) Approval of an AIS Proposal does not provide acquisition approval unless specifically stated. Reference (c) remains the basic delegation of authority for acquisition of IRM systems. Acquisition authority does not provide an exemption from the AIS planning requirements established in this instruction.
 - (3) Submission of an AIS Proposal to Commandant(G-TIS) ensures the system will be reviewed for inclusion in reference (d), the CG Automated Data Processing Plan. A comprehensive CG AIS Plan is the key to obtaining DOT, OMB and Congressional budget support. The content and format of the ADP Plan is under revision and will be republished as the CG Information Systems Architecture and Master Plan.
- d. Relation to Budget Process. The requirement for an AIS Proposal is in addition to requirements for submission of budget requests as part of the CG Programming and Budgeting System. However, all AIS requiring a budget request to Commandant(G-CCS) will normally meet the criteria for an AIS Proposal.

4. PROCEDURES.

- a. Notification. Notification to Commandant(G-TIS) is required for a planned AIS which meets the following criteria:
 - (1) Software for the AIS will be used by more than one unit or by more than one Headquarters office; or
 - (2) Includes acquisition of hardware, software, ADP services, facilities management, software development, and/or maintenance where the purchase is expected to exceed \$50,000. "Purchase" means the total expected cost a contract(s) or purchase(s) to implement the system. Purchase does not equate to life-cycle, but for multi-year contracts the full potential value of the contract must be used. Procurement may not be "split" to avoid this threshold.
- b. AIS Notification. For an AIS that requires Commandant (G-TIS) notification as discussed above, an AIS Notification must be prepared following the format of enclosure (1) and be received by Commandant(G-TIS) a minimum of thirty days before proceeding with system acquisition or development. The level of detail should reflect the size of AIS investment or impact on the organization. An AIS Notification should not exceed 2-3 pages.
- c. Approval. Approval of an AIS Proposal by Commandant (G-TIS) is required for the following systems:
 - (1) Systems where information processed by the AIS originates outside of Headquarters but is collected and processed to meet the requirements of a Coast Guard Program; or
 - (2) Software for the AIS will be used by units located within the geographical boundaries of more than one district; or
 - (3) Includes acquisition of hardware, software, ADP services, facilities management, software development, and/or maintenance where the purchase is expected to exceed \$100,000. See 4.a(2) above.

4. d. AIS Approval. For an AIS that requires Commandant(G-TIS) approval as discussed above, an AIS Proposal must be prepared following the format of enclosure (1) and submitted to Commandant(G-TIS). System acquisition and development may not proceed until written approval is received from Commandant(G-TIS). AIS Proposals will be reviewed and a response provided within thirty days of receipt. AIS Proposals must contain sufficient detail to allow responsible review; however, the early submission of a Preliminary AIS Proposal is strongly encouraged. As soon as concepts are developed for an AIS which will require Commandant(G-TIS) approval, a Preliminary AIS Proposal should be submitted to involve Commandant(G-TIS) as early as possible in the planning process. A Preliminary Proposal should follow the format of enclosure (1), but the information submitted may be identified as "to be developed" or "conceptual" as appropriate. The submission of a Preliminary AIS Proposal does not remove the requirement for subsequent submission of a AIS Proposal to Commandant(G-TIS) for approval.
5. ACTION. All area and district commanders, commanders of maintenance and logistics commands, unit commanding officers and chiefs of offices and special staff divisions at Headquarters initiating an information system project that meets the requirements of this instruction shall provide notification, submit a Preliminary AIS Proposal or AIS Proposal for approval of Commandant(G-TIS).

/s/ CLYDE T. LUSK, JR.
Chief of Staff

Encl: (1) Format for AIS Notification or Proposal

Encl (1) to COMDTINST 5231.2
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FORMAT FOR AIS NOTIFICATION OR (PRELIMINARY) AIS PROPOSAL

- (1) **NAME.** Provide AIS name and acronym (if applicable).
- (2) **PURCHASE COST.** Estimate cost for system purchase. The term "purchase" means the total expected value of a contract(s) or purchase(s) required to implement the system. For multi-year contracts the full potential value of the contract must be used.
- (3) **OBJECTIVE.** A definition of the objective of the AIS application, including a description of the problem to be solved.
- (4) **CONCEPT OF OPERATION.** A description of how the AIS will accomplish its objective. That is, what functions will be performed, including a concept of operation along with any communication requirements. Specify the date when system is expected to be operational.
- (5) **BENEFIT/COSTS.** A summary of expected life-cycle costs and benefits, including the effectiveness and/or efficiency improvements expected from the new AIS. The system life will be assumed to be five years unless a shorter or longer life-cycle can be justified.
- (6) **SYSTEM RESOURCE REQUIREMENTS.** A description of the minimum user hardware, software and data communications requirements (e.g., hard disk storage requirements, memory requirements, software licenses needed, planned means of connecting to communications systems, etc.). Determine whether or not the application will fit on target hardware and any upgrades required. This step requires coordination with field managers and IRM staffs to verify existing systems can support additional requirements. The mere presence of Standard Terminal equipment does not ensure such capacity. Commandant (G-TIS) will normally assist with this determination if requested.

- (7) **DATA MANAGEMENT.** A summary of data management considerations, including plans for data privacy, security and integrity. Identify and sensitive information (classified, FOUO, personnel, etc.) to be processed by the system, how it will be protected, and whether it will be communicated electronically. Also, the value of the data should be evaluated, with a discussion of how valuable data will be protected and reconstructed if lost or damaged.
- (8) **ORGANIZATIONAL IMPACT.** A description of the organizational implications of the proposed information system. Identify impact on existing personnel and any additional personnel resources needed. This includes an evaluation of whether or not the system is compatible with existing systems within the organization.
- (9) **USER IMPACT.** An explanation of the user's role and responsibility. Address workload impact if not already explained in (8) above.
- (10) **SUPPORT.** A description of how follow-on support will be provided, including hardware maintenance, software support and training. This must also identify the source of funds.
- (11) **ENVIRONMENT.** For new acquisitions, a detailed list of site preparation, security, and other requirements pertaining to environmental concerns.
- (12) **ALTERNATIVES.** A brief description of alternatives considered and reason for selection/rejection. If a microcomputer system is planned and CG Standard Terminal not selected explain reason.